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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,335	02/09/2004	Jun-Seog Kim	P56956	8915

7590 12/04/2006  
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EXAMINER

LE, DIEU-MINH T

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/773,335

Applicant(s)

KIM, JUN-SEOG

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 18 and 20-23 is/are rejected.
- 7) ☒ Claim(s) 9, 17 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/9/04 &amp; 11/2/06</u> . | 6) <input type="checkbox"/> Other: _____   |

**DETAILED ACTION**

1. This Office Action is response to the communication filed on 11/02/06 in application 10/773,335.

2. Claims 18 and 19 are objected to because of the following informalities:

As per claims 18 and 19, Applicant claims a computer-readable medium having stored thereon a data structure or a number of fields. However, the claim is not structured to specifically associate the **executable** programs instructions with the functions being performed, such that there is no doubt that the instructions performing these functions are stored on the computer readable medium. Such an association will eliminate any possible ambiguities that may lead to possible 35 U.S.C 101 problems regarding computer programs. Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 19, "field" after "third sub-field" needs to be deleted.

As per claim 20, the claim preamble does not clearly claim what method? Performing by software? Or hardware? And what is performing? Clarification is required.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8, 10-16, 18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinderman et al. (US. Pub. No. 2003/0204785 hereafter referred to as Kinderman) in view of Sundaram et al. (US. 6,564,341 hereafter referred to as Sundaram).

As per claim 1:

Kinderman substantially teaches the invention. Kinderman teaches:

- A method for supporting error cause of network management system configured by a Simple Network Management Protocol manager and a Simple Network Management Protocol agent (i.e., error detection and correction) [abstract, col. 1, par. 0024 and col. 2, par. 0027]; the method comprising the steps of:
  - selecting a standard error cause management interface to be used, when an error not defined by Simple Network Management Protocol error cause occurs [col. 3, par. 0003];

- numbering an error cause defined by the selected interface [col. 1, par. 0006 and col. 2, par. 0031];
- storing the numbered error cause in a database of the Simple Network Management Protocol manager database and a database of the Simple Network Management Protocol agent, respectively [col. 1, par. 0009].
- standard error cause is databased [col. 1, par. 0006 and co. 2, par. 0032].

Kinderman does not explicitly address:

- when ... exchanging a message between the Simple Network Management Protocol manager and the Simple Network Management Protocol agent, and conducting a network management operation.

However, Kinderman does disclose capability of:

- A method for error reporting, detecting, and correcting (EDAC) via SNMP manager/agent process [abstract, fig. 1, col. 1, par. 0003-0009] comprising:
  - message responding to error status via routing transmission between SNMP manager and agent [col. 1, par. 0021-0022 and col. 2, par. 0026].

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In addition, Sundaram explicitly teaches:

- A system and method for fault monitoring via SNMP interface between SNMP manager and agent communication

[abstract, col. 1, lines 14-17] comprising:

- data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing [col. 10, lines 50 through col. 11, lines 2 and col. 12, lines 50 through col. 13, lines 2].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to first realizing Kinderman's message responding to error status via routing transmission between SNMP manager and agent as being the when ... exchanging a message between the Simple Network Management Protocol manager and the Simple Network Management Protocol agent, and conducting a network management operation as claimed by Applicant. This is because Kinderman's error detection and correction capability in SNMP explicitly performed data/error monitoring, detecting, executing, analyzing via its SNMP manager and agent communication/transmission processes. By utilizing these capabilities, the network processing within the computing network management system, more specifically the data SNMP, can be selected and/or configured

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properly via its data fetching, executing, and storing, based upon its error condition response and determination in supporting the EDAC operation; second, by applying the **data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing** as taught by Sundaram in conjunction with the method for error reporting, detecting, and correcting (EDAC) via SNMP manager/agent process as taught by Kinderman, the SNMP system within the network computing management system can enhance its operation performance, more specifically to ensuring the error detected, corrected, in proper and efficient manner via its error analysis and data exchanging or communication processes between the **SNMP manager and agent**.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the SNMP computing system operation availability and network/system performance therein with a mechanism to enhance the data memory access, data debugging, data reliability, and data throughput which eventually will increase its performance, such as data throughput between internal and external devices.

As per claim 2:



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Kinderman further teaches:

- Transaction Language 1 is used for the standard error cause interface selected [col. 1, par. 0006 and col. 2, par. 0032].

In addition, Sundaram explicitly teaches:

- A system and method for fault monitoring via SNMP interface between SNMP manager and agent communication [abstract, col. 1, lines 14-17] comprising:
  - **data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing** [col. 10, lines 50 through col. 11, lines 2 and col. 12, lines 50 through col. 13, lines 2].

As per claims 3-5:

Kinderman further teaches:

- numbering an error cause defined by the selected interface [col. 1, par. 0006 and col. 2, par. 0031];
- error causes are numbered by categorizing the kinds of error and sub-categorizing [col. 1, par. 0009].

Kinderman does not explicitly address:

- error objects and kinds of error causes are numbered at 200 interval.

However, Kinderman does disclose capability of:

- A method for error reporting, detecting, and correcting (EDAC) via SNMP manager/agent process [abstract, fig. 1, col. 1, par. 0003-0009] comprising:

- ***message responding to error status via routing transmission between SNMP manager and agent*** [col. 1, par. 0021-0022 and col. 2, par. 0026] via ***a lookup database process*** [col. 3, par. 0042].

In addition, Sundaram explicitly teaches:

- A system and method for fault monitoring via SNMP interface between SNMP manager and agent communication [abstract, col. 1, lines 14-17] comprising:
  - ***data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing*** [col. 10, lines 50 through col. 11, lines 2 and col. 12, lines 50 through col. 13, lines 2] ***utilizing the object oriented process within the management information base (MIB)*** [col. 1, lines 39 through col. 2, lines 32].

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to first realizing Kinderman's ***message responding to error status via routing transmission between SNMP manager and agent via a lookup database process*** as being the error objects and kinds of error causes are numbered at 200 interval as claimed by Applicant. This is because Kinderman's error detection and correction capability in SNMP explicitly used the object code or object functionality to deal with error numbering and data/error monitoring, detecting, executing, analyzing via its ***SNMP manager and agent communication/transmission*** processes; second, by applying the data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing ***utilizing the object oriented process within the management information base (MIB)*** as taught by Sundaram in conjunction with the method for error reporting, detecting, and correcting (EDAC) via SNMP manager/agent process as taught by Kinderman, the SNMP system within the network computing management system can enhance its operation performance between the ***SNMP manager and agent*** for the same reasons set forth as described in claim 1, *supra*.

As per claims 6-8:

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Kinderman further teaches:

- wherein the standard error cause stored in the databases is interpreted based on an error status corresponding to a number given by an error analysis application that is installed in the Simple Network Management Protocol agent and the Simple Network Management Protocol manager (i.e., **error detection and correction**) [col. 1, par. 0024 and col. 2, par. 0027, 0031, and 0036];
- wherein the standard error cause stored in the databases is represented by a number in an Err-Status field of Simple Network Management Protocol (SNMP) Protocol Data Unit, in accordance with the kind of an error [col. 1, par. 0006 and col. 2, par. 0031];
- storing the numbered error cause in a database of the Simple Network Management Protocol manager database and a database of the Simple Network Management Protocol agent, respectively [col. 1, par. 0009].

In addition, Sundaram explicitly teaches:

- A system and method for fault monitoring via SNMP interface between SNMP manager and agent communication [abstract, col. 1, lines 14-17] comprising:

- data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing [col. 10, lines 50 through col. 11, lines 2 and col. 12, lines 50 through col. 13, lines 2].

As per claim 10:

This claim is similar to claim 1. The only minor different is that claim 10 introduce "a SNMP manager/agent mounted with a database" within an apparatus for supporting error cause of network management system instead of a method for supporting error cause of network management system as described in claim 1. However, Sumdaram explicitly disclosed data communication exchange between the SNMP manager and agent in supporting the error detection, monitoring, and processing [col. 10, lines 50 through col. 11, lines 2 and col. 12, lines 50 through col. 13, lines 2] **utilizing the object oriented process within the management information base (MIB)** (i.e., SNMP manager/agent mounted with a database) [col. 1, lines 39 through col. 2, lines 32] in combining with Kindeman's ***message responding to error status via routing transmission between SNMP manager and agent*** [col. 1, par. 0021-0022 and col. 2, par. 0026] via **a lookup database process** (i.e., SNMP manager/agent mounted with a database) [col. 3, par. 0042]; Therefore, this claim is also

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rejected under the same rationale applied against claim 1. **In addition, all of the limitations have been noted in the rejection as per claim 1.**

As per claims 11-16:

These claims are the same as per claims 1-8. The only minor different is that these claims are directed to a **computer-readable medium having computer-executable instruction for performing a method** instead of the method for supporting error cause of network management system as described in claims 1-8, respectively. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that a **computer-readable medium** is a necessary item for such computer network management networking system, more specifically, SNMP transmission between manager and agent. Since the SNMP manager and agent obviously needs a means for instruction or code means resided within the machine-readable storage medium for performing the data storing, receiving, transmitting operation via the MIB functionality. Therefore, these claims are also rejected under the same rationale applied against claims 1-8.

As per claim 18:

This claim is the same as per claim 1. The only minor different is that this claim is directed to a **computer-readable medium having stored data structure** instead of the method for supporting error cause of network management system as described in claim 1. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that a **computer-readable medium** is a necessary item for such computer network management networking system, more specifically, SNMP transmission between manager and agent. Since the SNMP manager and agent obviously needs a means for instruction or code means resided within the machine-readable storage medium for performing the data storing, receiving, transmitting operation via the MIB functionality. Therefore, this claim is also rejected under the same rationale applied against claim 1.

As per claims 20-23:

These claims are similar to claims 1-8. The only minor different is that these claims introduce "a first and second protocols" within method instead of a method for supporting error cause of network management system as described in claims 1-8. However, Kindeman's **message responding to error status via routing transmission between SNMP manager and agent** [col. 1,

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par. 0021-0022 and col. 2, par. 0026] via a multi-protocol architecture capability [col. 1, par. 0022 and col. 2, par. 0028]; Therefore, these claims are also rejected under the same rationale applied against claims 1-8. **In addition, all of the limitations have been noted in the rejection as per claims 1-8.**

**Allowable Subject Matter**

6. Claims 9, 17, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh



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Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**DIEU-MINH THAI LE**  
**PRIMARY EXAMINER**  
**ART UNIT 2114**

DML  
11/25/06